CHAPTER 8:

Evaluating Air Emissions: Hazardous Air Pollutants (HAPs)

The **CLEAN AIR ACT** (CAA) is the federal law which regulates air emissions from both stationary (e.g., factories) and mobile (e.g., vehicles) sources. Among other things, this law authorized the EPA to establish National Ambient Air Quality

Standards (NAAQS) to protect public health and the environment. Regulations written to achieve NAAQS require that industrial facilities limit the amount of certain chemicals that they release to the air. The CAA also requires EPA to set limits on selected hazardous air pollutants, or HAPs. The list of HAPs is located in Appendix F. For printers, HAPs will be found in the same chemicals that RTAPs are found (see chapter 7): blanket and roller washes, fountain solutions, developer solutions, and other miscellaneous chemicals.

Hazardous Air Pollutants

The EPA has designated 188 chemicals and chemical compound groups as Hazardous Air Pollutants (HAPs) due to their toxicity to humans and effects on the environment. In Chapter 7, New Hampshire Regulated Toxic Air Pollutants (RTAPs) were discussed. Every chemical designated a HAP by EPA is also a RTAP under the NHDES rule Env-A 1400.

The worksheets that you completed for determining the de minimum calculations in Chapter 7 will assist you with the determination of your HAP emissions.

HAPs emissions are regulated in two ways:

- By individual HAP, and
- By total facility-wide HAP emissions. This is determined by adding the sum of each individual HAP together.

Hazardous Air Pollutants (HAP) Air Levels

TOTAL Facility-wide HAP Emissions (pounds/year)	Individual HAP Emissions (pounds/year)		HAP Air Level	
less than 25,000	less than 10,000	→	Level 1	
25,000 < 50,000	10,000 < 20,000	→	Level 2	
50,000 or more	20,000 or more	→	Level 3	

Determining the HAP Air Level for the Facility

From Chapter 7, review your completed Worksheet 1. Cross reference the RTAPs that you emit with the list of HAPs located in Appendix G. For each HAP on your Worksheet 1, review the completed Worksheet 3. From Worksheet 3, Column F, your facility's actual emissions for that RTAP/HAP has been determined. From each of the Worksheet 3's, complete the following table:

Hazardous Air Pollutant Emission Determination				
Hazardous Air Pollutant	CAS #	Annual Emissions,		
(HAP)		Pounds/Year		
Name		(Worksheet 3, Column F)		
Total HAP Emissions				

From this table, compare your Individual HAP Emissions (pounds/year) and your Total HAP Emissions (pounds/year) with the HAP Level described on the previous page. Use either the Total HAP Emissions or the highest Individual HAP Emissions for your HAP Air Level determination.

This is your HAP Air Level	>>	
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The three HAP Air Levels have different requirements, complete the requirements for your determined level.

HAP Air Level 1 Requirements

- 1. **Required Calculations:** Worksheets 1, 2 & 3 on an annual basis. These are required to assure that Level 1 thresholds are not exceeded.
- 2. Recordkeeping:
 - Completed Worksheets 1, 2, & 3 on file
 - Maintain annual usage or purchase records for each product.
 - Maintain MSDSs for each product.
 - Keep these records on-site for 5 years.
- 3. **Reporting:** If your facility HAP Air Level changes to a higher level, your facility must resubmit a completed PrintSTEP Application.
- 4. **Public Involvement**: None required.

HAP Air Level 2 Requirements

- **1. Required Calculations:** Worksheets 1, 2 & 3 on an annual basis. These are required to assure that Level 2 thresholds are not exceeded.
- **2. Facility Limitations:** Maintain all facility limitations outlined in your PrintSTEP Agreement issued by the NHDES.
- 3. Recordkeeping:
 - Completed Worksheets 1, 2, & 3 on file
 - Maintain annual usage or purchase records for each product on a rolling 12-month basis.
 - Maintain MSDSs for each product.
 - Keep these records on-site for 5 years.
- **4. Reporting:** If your facility HAP Air Level changes to a higher level, your facility must resubmit a completed PrintSTEP Application.
- 5. **Public Involvement:** Limited Public Participation

HAP Air Level 3 Requirements

Facility is considered a Major Source for Hazardous Air Pollutants and must receive a Title V Air Permit from the NHDES. Contact the Air Resources Division at 603-271-6793 for assistance.